Practitioner's Docket No. U 13868-3 **PATENT**

PTO/PCT Rec'd 25 JUL 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Jiuliang QIAO, et al.
Serial No.: 10/049,233
International Application No.: PCT/CN01/00972
International Filing Date: June 15, 2001

For: FULLY VULCANIZED THERMOPLASTIC ELASTOMER, PREPARATION AND USE THEREOF

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

PRELIMINARY AMENDMENT

Please amend the above identified application as follows:

IN THE CLAIMS :

Please cancel claim 17.

Please amend claims 4, 5, 6, 7, 8, 14, 15 and 16 as follows:

4. (Amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that the average particle size of said rubber phase is 0.05μ~0.5μ, more preferably 0.05μ~0.2μ.

CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231

Date: April 26, 2002

(Signature of person mailing paper)

Clifford J. Mass
(type or print name of person certifying)

5. (Amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that the weight ratio of rubber phase to plastic is 30:70 to 75:25, preferably 50:50 to 75:25.

6. (Amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that said rubber phase has a gel content of at least 60% by weight, preferably at least 75% by weight.

7. (Amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that the plastic matrix of said fully vulcanized thermoplastic elastomer comprises at least one polymer or copolymer thereof selected from the group consisting of polyamide, polypropylene, polyethylene, polyvinyl chloride, polyurethane, polyester, polycarbonate, polyoxymethylene, polystyrene, polyphenylene oxide, polyphenylene sulfide, polyimide and polysulfone.

8. (Amended) The fully vulcanized thermoplastic elastomer according to claim 1, characterized in that the rubber phase of said fully vulcanized thermoplastic elastomer comprises at least one rubber selected from the group consisting of natural rubber, styrene-butadiene rubber, carboxylated styrene-butadiene rubber, nitrile rubber, carboxylated nitrile rubber, polybutadiene rubber, chloroprene rubber, silicone rubber, acrylic rubber, styrene-butadiene-vinylpyridine rubber, isoprene rubber, butyl rubber ethylene-propylene rubber, polysulfide rubber, acrylic-butadiene rubber, polyurethane rubber, and fluorine rubber.

14. (Amended) The process according to claim 9, characterized in that the average particle size of the fully vulcanized powdery rubber is 0.05μ~0.5μ, preferably 0.05μ~0.2μ.

15. (Amended) The process according to claim 9, characterized in that said fully vulcanized powdery rubber comprises at least one rubber selected from the group consisting of fully vulcanized powdery natural rubber, fully vulcanized powdery styrene-butadiene rubber, fully vulcanized powdery carboxylated styrene-butadiene rubber, fully vulcanized powdery nitrile rubber, fully vulcanized powdery carboxylated nitrile rubber, fully vulcanized powdery polybutadiene rubber, fully vulcanized powdery chloroprene rubber, fully vulcanized powdery silicone rubber, fully vulcanized powdery acrylic rubber, fully vulcanized powdery styrene-butadiene-vinylpyridine rubber, fully vulcanized powdery isoprene rubber, fully vulcanized powdery butyl rubber, fully vulcanized powdery ethylene-propylene rubber, fully vulcanized powdery polysulfide rubber, fully vulcanized powdery acrylic-butadiene rubber, fully vulcanized powdery polyurethane rubber, and fully vulcanized powdery fluorine rubber.

16. (Amended) The process according to claim 9, characterized in that said plastic comprises at least one polymer or copolymer thereof selected from the group consist of polyamide, polypropylene, polyethylene, polyvinyl chloride, polyurethane, polyester, polycarbonate, polyoxymethylene, polystyrene, polyphenylene oxide, polyphenylene sulfide, polyimide and polysulfone.

Please add new claim 18 as follows:

18. (New) A method comprising preparing a moulded article with the vulcanized thermoplastic elastomer of claim 1.

Remarks

The above amendatory action is taken solely for the purpose of avoiding claim fees that would otherwise accrue due to the presence of multiple dependent claims.

Respectfully submitted,

CLIFFORD J. MASS
LADAS & PARRY
26 WEST 61ST STREET
NEW YORK, NEW YORK 10023
REG.NO.30,086 (212)708-1890

MARKED UP COPY

4. (Amended) The fully vulcanized thermoplastic elastomer according to [any of] claim[s] 1 [to 3], characterized in that the average particle size of said rubber phase is 0.05μ~0.5μ, more preferably 0.05μ~0.2μ.

5. (Amended) The fully vulcanized thermoplastic elastomer according to [any of] claim[s] 1 [to 4], characterized in that the weight ratio of rubber phase to plastic is 30:70 to 75:25, preferably 50:50 to 75:25.

6. (Amended) The fully vulcanized thermoplastic elastomer according to [any of] claim[s] 1 [to 5], characterized in that said rubber phase has a gel content of at least 60% by weight, preferably at least 75% by weight.

7. (Amended) The fully vulcanized thermoplastic elastomer according to [any] claim[s] 1 [to 6], characterized in that the plastic matrix of said fully vulcanized thermoplastic elastomer comprises at least one polymer or copolymer thereof selected from the group consisting of polyamide, polypropylene, polyethylene, polyvinyl chloride, polyurethane, polyester, polycarbonate, polyoxymethylene, polystyrene, polyphenylene oxide, polyphenylene sulfide, polyimide and polysulfone.

8. (Amended) The fully vulcanized thermoplastic elastomer according to [any of] claim[s] 1 [to 7], characterized in that the rubber phase of said fully vulcanized thermoplastic elastomer comprises at least one rubber selected from the group consisting of natural rubber, styrene-butadiene rubber, carboxylated styrene-butadiene rubber, nitrile rubber, carboxylated nitrile rubber, polybutadiene rubber, chloroprene rubber, silicone rubber, acrylic rubber, styrene-butadiene-vinylpyridine rubber, isoprene rubber, butyl rubber ethylene-propylene rubber, polysulfide rubber, acrylic-butadiene rubber, polyurethane rubber, and fluorine rubber.

14. (Amended) The process according to [any of] claim[s] 9 [to 13], characterized in that the average particle size of the fully vulcanized powdery rubber is 0.05μ~0.5μ, preferably 0.05μ~0.2μ.

15. (Amended) The process according to [any of] claim[s] 9 [to 14], characterized in that said fully vulcanized powdery rubber comprises at least one rubber selected from the group consisting of fully vulcanized powdery natural rubber, fully vulcanized powdery styrene-butadiene rubber, fully vulcanized powdery carboxylated styrene-butadiene rubber, fully vulcanized powdery nitrile rubber, fully vulcanized powdery carboxylated nitrile rubber, fully vulcanized powdery polybutadiene rubber, fully vulcanized powdery chloroprene rubber, fully vulcanized powdery silicone rubber, fully vulcanized powdery acrylic rubber, fully vulcanized powdery styrene-butadiene-vinylpyridine rubber, fully vulcanized powdery isoprene rubber, fully vulcanized powdery butyl rubber, fully vulcanized powdery ethylene-propylene rubber, fully vulcanized powdery polysulfide rubber, fully vulcanized powdery acrylic-butadiene rubber, fully vulcanized powdery polyurethane rubber, and fully vulcanized powdery fluorine rubber.

16. (Amended) The process according to [any of] claim[s] 9 [to 15], characterized in that said plastic comprises at least one polymer or copolymer thereof selected from the group consist of polyamide, polypropylene, polyethylene, polyvinyl chloride, polyurethane, polyester, polycarbonate, polyoxymethylene, polystyrene, polyphenylene oxide, polyphenylene sulfide, polyimide and polysulfone.